

CLAIMS

1. Agent for oxidative treatment containing

a) at least one oxidant

b) at least one peroxide stabilizer,

c) at least one polymer thickener selected from the groups of

(i) copolymers of acrylic acid,

(ii) polymers with propyleneoxy groups,

(iii) copolymers of vinylpyrrolidone,

(iv) hydroxyalkylstarch phosphates and

(v) alkali metal magnesium silicates

and

d) water or an aqueous solvent.

2. Agent as defined in claim 1, characterized in that it is in the form of a gel.

3. Agent as defined in claim 1 or 2, characterized in that it is transparent.

4. Agent as defined in one of claims 1 to 3, characterized in that the oxidant is selected from among hydrogen peroxide, alkali metal bromates, alkaline earth metal bromates, ammonium bromate, alkali metal persulfates, alkaline earth metal persulfates, ammonium persulfate, alkali metal perborates, alkaline earth metal perborates, ammonium perborate, alkali metal percarbonates, alkaline earth metal percarbonates, calcium peroxide and sodium iodate.

5. Agent as defined in one of Claims 1 to 4, characterized in that it contains a bromate as the oxidant and has a pH between 7 and 8.5.

6. Agent as defined in one of Claims 1 to 4, characterized in that it has a pH of 2 to 6.

7. Agent as defined in one of Claims 1 to 6, characterized in that it contains the oxidant in an amount from 0.1 to 25 weight percent.

8. Agent as defined in one of Claims 1 to 7, characterized in that the stabilizer is selected from among dialkali metal hydrogen phosphates, p-acetamidophenol, hydroxyquinoline salts, salicylic acid and salts thereof, 1-hydroxyethane-1,1-diphosphonic acid, tetrasodium 1-hydroxyethane-1,1-diphosphonate, tetrasodium iminodisuccinate, ethylenediaminetetraacetic acid tetrasodium salt and N-(4-ethoxyphenyl)acetamide.

9. Agent as defined in one of Claims 1 to 8, characterized in that it contains the stabilizer in an amount from 0.01 to 2 weight percent.

10. Agent as defined in one of Claims 1 to 9, characterized in that the stabilizer is a 2-component combination, the combination being selected from the following:

EDITRONIC ACID and SALICYLIC ACID,
EDITRONIC ACID and DISODIUM PHOSPHATE,
TETRASODIUM EDITRONATE and SALICYLIC ACID,
TETRASODIUM EDITRONATE and SALICYLIC ACID
TETRASODIUM EDITRONATE and DISODIUM PHOSPHATE.

11. Agent as defined in one of Claims 1 to 9, characterized in that it contains the stabilizer in an amount from 0.1 to 0.3 wt.% and that the stabilizer is selected from among TETRASODIUM EDITRONATE, SALICYLIC ACID and EDITRONIC ACID.

12. Agent as defined in one of Claims 1 to 11, characterized in that the polymer thickener is selected from the following table:

No.	INCI/CTFA NAME	Chemical Designation
(8)	ACRYLATES COPOLYMER	Copolymer of acrylic acid and methacrylic acid or of simple esters thereof
(9)	ACRYLATES/C ₁₀₋₃₀ ALKYL ACRYLATE CROSSPOLYMER	Copolymer of C ₁₀₋₃₀ -alkyl acrylate and acrylic acid, methacrylic acid or simple esters thereof, crosslinked with an allyl ether of sucrose or an allyl ether of pentaerythritol
(10)	ACRYLATES/ACRYLAMIDE COPOLYMER	Copolymer of acrylamide and acrylic acid, methacrylic acid or simple esters thereof (CAS No. 9003-06-9)
(11)	AMMONIUM ACRYLOYLDIMETHYLTAURATE/BEHENETH-25 METHACRYLATE COPOLYMER	Copolymer of ammonium acryloyldimethyltaurate and Beheneth-25 methacrylate
(12)	AMMONIUM ACRYLOYLDIMETHYLTAURATE/VP COPOLYMER	Copolymer of ammonium acryloyldimethyltaurate and vinylpyrrolidone
(13)	CARBOMER	Homopolymer of acrylic acid, methacrylic acid, crosslinked with an allyl ether of sucrose, of pentaerythritol or of propylene
(14)	HYDROXYPROPYL STARCH PHOSPHATE	Hydroxypropyl ether of distarch phosphate
(15)	POLYQUATERNIUM-44	Copolymer of 3-methyl-1-vinyl-1H-imidazolium methylsulfate and 1-vinyl-2-pyrrolidone
(16)	POLYQUATERNIUM-37	N,N,N-Trimethyl-2-[(methyl-1-keto-2-propenyl)oxy] chloride homopolymer

(17)	POLYQUATERNIUM-37, MINERAL OIL, SORBITAN OLEATE, PEG-1/PPG-6 TRIDECETH 6, C10-12 ALKANE/CYCLOALKANE	Mixture of N,N,N-trimethyl-2-[(methyl-1-keto-2-propenyl)oxy] chloride homopolymer, sorbitan monooleate, polyethylene glycol/polypropylene glycol tridecyl ether, C ₁₀₋₁₂ -alkanes and cycloalkanes (CAS 64742-48-9)
(18)	POLYQUATERNIUM-37, SORBITANE OLEATE, PROPYLENE GLYCOL DICAPRYLATE/DICAPRATE, PPG-1 TRIDECETH-6, C10-12 ALKANE/CYCLOALKANE	Mixture of N,N,N-trimethyl-2-[(methyl-1-keto-2-propenyl)oxy] chloride homopolymer, sorbitan monooleate, propylene glycol dicaprylate (EINECS 271-516-3), polypropylene glycol tridecyl ether, C ₁₀₋₁₂ alkanes and cycloalkanes (CAS 64742-48-9)
(19)	SODIUM MAGNESIUM SILICATE	Sodium magnesium silicate

13. Agent as defined in one of Claims 1 to 12, characterized in that it contains the polymer thickener in an amount from 0.1 to 5.0 weight percent.

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14. Agent as defined in one of Claims 1 to 13, characterized in that it contains water in an amount from 50 to 98 wt.%.

15. Agent as defined in one of Claims 1 to 14, characterized in that it contains an alcohol in an amount from 1 to 20 wt.%.

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16. Agent as defined in Claim 15, characterized in that the alcohol is 1,2,3-propanetriol.

17. Agent as defined in one of Claims 1 to 16, characterized in that it contains at least one cationic polymer.

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18. Agent as defined in one of Claims 1 to 17, characterized in that it contains at least one amphoteric surface-active compound selected from the carboxyl derivatives of imidazole, N-alkylamidobetains, N-alkylsulfobetains, N-alkylaminopropionates, alkyltrimethylcarboxymethylammonium salts with 12 to 18 carbon atoms and fatty acid alkylamidobetains.

19. Agent as defined in one of Claims 1 to 18, characterized in that it has a viscosity of 100 to 30,000 mPa s measured at 25 °C with a VT 550 Haake Rotational Viscometer at a shearing rate of 12.9 per second.

20. Agent as defined in one of Claims 1 to 19, characterized in that it is in the form of a 2-component preparation and is prepared just before use by mixing the pure polymer thickener or a composition containing the polymer thickener (Component 1) with an aqueous hydrogen peroxide solution (Component 2).